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(54) Title: THERAPEUTIC ADMINISTRATION OF THE SCRAMBLED ANTI-ANGIOGENIC PEPTIDE C16Y

(57) Abstract: Unregulated angiogenesis is associated with a variety of pathological conditions. Tumor growth and metastasis is dependent on the development of new blood vessels. The development of new blood vessels in the eye, or ocular neovascularization, has been implicated in a variety of serious ocular diseases. For instance, choroidal neovascularization is linked to age-related macular degeneration, while retinal neovascularization is linked to diabetic retinopathy. The present invention is based on the discovery of a peptide sequence, C16Y, which inhibits ocular neovascularization and tumor growth *in vivo*. C16Y is a scrambled version of the C16 peptide sequence from the y1 chain of laminin-1. Unlike C16, which is an angiogenic stimulator, C16Y has been shown to inhibit angiogenesis. The present invention discloses methods of treating ocular neovascularization and cancer using both full-length and truncated versions of the C16Y.



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